

AMENDED VERSION OF THE CLAIMS

1. An optical pick-up device comprising:

a lens that focuses light onto a surface of a recording medium;

a lens holder that holds the lens;

a suspension holder that supports the lens holder disposed opposite a distal end of the lens holder;

a frame formed so as to be disposed opposite both lateral surfaces of the lens holder and the distal end of the lens holder, the frame supporting the suspension holder;

a plurality of elastic supports that movably support the lens holder, a distal end of the elastic supports mounted on the suspension holder and a proximal end retained by the lens holder; and

an actuator that drives the lens holder, the actuator including a focus coil, a tracking coil and at least one magnet,

wherein a plurality of projections are provided on at least one of the frame and the suspension holder, with the projections acting as stoppers that restrict rotation of the lens holder so as to prevent excessive deformation of the elastic supports.

2. An optical pick-up device comprising:

a lens that focuses light onto a surface of a recording medium;

a lens holder that holds the lens;

a suspension holder that supports the lens holder disposed opposite a distal end of the lens holder;

a frame formed so as to be disposed opposite both lateral surfaces of the lens holder and the distal end of the lens holder, the frame supporting the suspension holder;

a plurality of elastic supports that movably support the lens holder, a distal end of the elastic supports mounted on the suspension holder and a proximal end retained by the lens holder;

an actuator that drives the lens holder, the actuator including a focus coil, a tracking coil and at least one magnet,

and a plurality of projections disposed on the lens holder including first and second projections wherein the first projections are located at both sides thereof, with the elastic supports fixed to the first projections and wherein the second projections are separated from the first projections a predetermined distance, such that the distance separating the second projections from the recording surface is smaller than the distance separating the first projections from the recording surface; and

wherein the second projections project a sufficient distance from the lens holder such that, even if the first projections come into contact with the frame and the lens holder rotates about a projection end of the first projections, the rotation will be controlled by the second projections so that the elastic support is prevented from being deformed physically.

5. The optical pick-up device as claimed in claim 2, wherein the plurality of projections is provided at least on the lateral surfaces of the lens holder toward the proximal end of the lens holder and on a surface of the suspension holder opposite the distal end of the lens holder.

6. The optical pick-up device as claimed in claim 2, wherein the elastic supports are cantilever springs.

7. The optical pick-up device as claimed in claim 2 wherein the first projections and the second projections have outer surfaces at the respective ends thereof which project from the lens holder approximately the same distance.